

REMARKS

This paper is submitted in response to the final Office Action mailed on October 20, 2006. Claims 1-9, 15 and 16 remain pending in the application. In view of the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

Claims 1-2, 9, 15 and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Mullane. In the previous Office Action response, Applicants noted that Mullane disclosed a threaded connection to secure a connector to the bone anchoring assembly. For instance, as most notably shown in Figs. 14 and 16 of Mullane, a toggle bolt (22) has a ball end (40) that is received in a retention cavity (34') of bone anchoring assembly (12') and a threaded end (42) that is received through an aperture (84) of connector (52). As clearly shown in these figures, the threaded end (42) includes external threads (120) and an internal threaded bore (122). To secure the connector (52) to the bone anchoring assembly (12') a securing nut (116), as shown in Fig. 11, is threaded onto the threaded end (42) via external threads (120).

As one of ordinary skill in the art will appreciate, to thread securing nut (116) onto end (42) one must apply a rotational torque to the nut (116) relative to the end (42) to effectuate the connection. The locking bolt (118), as shown in Fig. 12, having external threads (not numbered in figure) is then threaded into the internal threaded bore (122) to lock the connector (52) and anchoring assembly (12') relative to each other. To thread the locking bolt (118) into bore (122) one must apply a rotational torque to the head (124) of locking bolt (118).

In the previous Office Action response, Applicants noted that in contrast to the disclosure of Mullane, independent claim 1 recited "application of a non-rotational, linear force to said linear fastener fixedly engages said fastener about said linking member first end to produce and maintain a clamping force effective to produce a spinal fixation assembly."

In regard to this argument, the final Office Action states: "The amount of torque applied to the fixation system is relative to the user assembling the device and what is required in the surgery, so to a greater or lesser torque would not necessarily affect the structure of the Mullane reference meeting the claim limitations." (Final Office Action, p. 2). Applicants' representative fails to completely understand the Examiner's response on this point. Claim 1 does not define over Mullane by the amount or magnitude of the torque applied, but to the fact that Mullane clearly teaches that a rotational torque (force) must be applied to effectuate the connection. This is distinguished from the language specifically recited in claim 1 wherein the connection is effectuated by the application of a "non-rotational, linear force". Accordingly, the magnitude of the force is not paramount to distinguishing Mullane from the invention recited in claim 1.

The final Office Action further states:

In reference to a "non-rotational["] force, per-se, as it acts on what is considered a linear fastener, it is a downward, at least linear force to secure the linear fastener. In other words, a rotational force, per-se, and as mentioned above is relative to what the user may require or provide, may rotate, but at least indirectly applies a linear force as required to the linear fastener.

(Id.). Applicants' representative understands the Examiner to assert that although

Mullane may teach a threaded connection that requires rotation, that rotation has at least a component in the downward direction and thus provides a linear force that the Examiner believes meets the claim language.

Applicants' representative admittedly is having a difficult time understanding the Examiner's position. Applicants' representative appreciates the courtesy extended by the Examiner in initially agreeing to a personal interview while the aforementioned representative was in Washington D.C. recently in order to clarify the Examiner's response and position. Applicants' representative also understands the Examiner's reasons for canceling the interview and appreciates the Examiner's willingness to consider the case. Any misunderstandings concerning the Examiner's response to the previous Office Action response will have to be corrected via this response and any subsequent Office Actions.

Applicants believe that the Examiner is focusing on the "linear" aspect of the language of claim 1 instead of the "non-rotational" aspect of the claim language. As recited in claim 1, the force that is applied to the linear fastener is both non-rotational and linear to fixedly engage the fastener about the linking member. The Examiner must consider the non-rotational as well as the linear aspects of the force. Mullane clearly teaches applying a rotational force to connect nut (116) with toggle bolt (22). Applicants fail to understand how a reference that clearly teaches a rotational force can anticipate a claim that clearly recites a "non-rotational" force. Applicants respectfully request the Examiner to reconsider his position and more thoroughly explain how the recitation of a

"non-rotational" force does not overcome the rejection based on the teaching of Mullane. These are opposite positions incapable of reconciliation.

As noted in the previous Office Action response, the distinction between what is recited in claim 1 and what is taught in Mullane is not a contrivance to overcome the rejection. The application specifically discusses the disadvantages of rotational-type of systems and the advantages afforded by the linear fastener of the invention. For at least the above reasons, Applicants respectfully submit that Mullane fails to teach or suggest the combination of elements recited in independent claim 1 and the claim is allowable.

For purposes of appeal, Applicants also maintain their positions submitted in the previous Office Action response in regard to independent claim 1 as well as to claims 2-9, which depend from claim 1. Moreover, independent claim 15 recites "application of a non-rotational, linear force to said linear fastener fixedly engages said fastener about said first end of said linking member," in a manner similar to claim 1. Thus, for the reasons provided above in regard to claim 1, Applicants respectfully submit that claim 15 is allowable. As claim 16 depends from allowable claim 15, Applicants further submit that this claim is allowable as well.

Conclusion

In view of the foregoing remarks, this application is submitted to be in complete condition for allowance and early notice to this affect is earnestly solicited. If the Examiner believes any matter requires further discussion, the Examiner is respectfully invited to telephone the undersigned attorney so that the matter may be promptly resolved.

Applicants do not believe that any fees are due in connection with this response. However, if such petition is due or any fees are necessary, the Commissioner may consider this to be a request for such and charge any necessary fees to deposit account 23-3000.

Respectfully submitted,

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